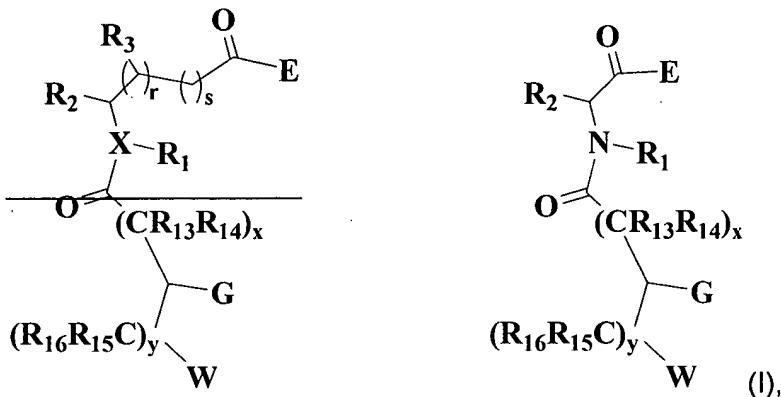


Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of claims:

1. (Currently Amended) A compound of formula (I),



or a pharmaceutically-acceptable salt[,] or hydrate, or prodrug thereof, in which:

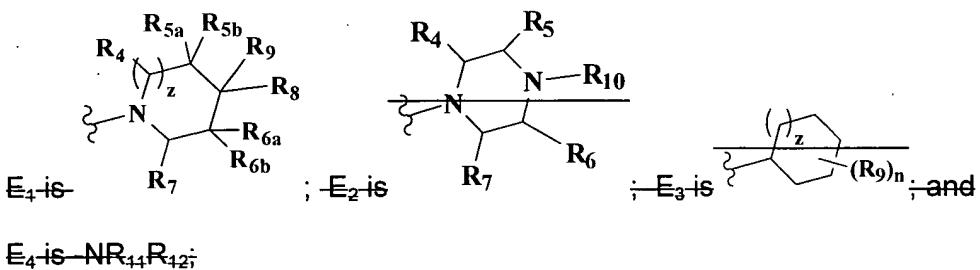
X is N or CH;

R₁ is hydrogen or C₁₋₆alkyl or is taken together with R₂ or R₃ to form a monocyclic or bicyclic aryl, cycloalkyl, heteroaryl or heterocycle;

R₂ is hydrogen, aryl, cycloalkyl, heteroaryl, or heterocycle; or C₁₋₆alkyl or C₂₋₆alkenyl optionally substituted with one to three of hydroxy, alkoxy, halogen, cyano, trifluoromethyl, nitro, amino, alkylamino, aryl, cycloalkyl, or heteroaryl[,], and/or heterocycle; or R₂ is taken together with R₁ or R₃ to form a monocyclic or bicyclic aryl, cycloalkyl, heteroaryl or heterocycle; provided that where G is C₂₋₆alkenyl, A₁-NR₁₈CO₂R₁₉, or A₁-SO₂R₁₇, or when y is 0, R₂ may be or C₁₋₆alkyl or C₂₋₆alkenyl, each optionally substituted with heteroaryl;

R₃ is hydrogen or C₁₋₆alkyl or is taken together with R₂ to form a monocyclic or bicyclic aryl, cycloalkyl, heteroaryl or heterocycle;

E is E₁, E₂, E₃ or E₄, wherein



G is selected from $\text{C}_{2-6}\text{alkenyl}$, $\text{A}_3\text{-aryl}$, $-\text{OR}_{18}$, heteroaryl, $\text{A}_1\text{-cyano}$, $\text{A}_2\text{-OR}_{17}$, $\text{A}_1\text{-C(=O)R}_{18}$, $\text{A}_1\text{-CO}_2\text{R}_{18}$, $\text{A}_1\text{-C(=O)NR}_{18}\text{R}_{19}$, $\text{A}_1\text{-OC(=O)R}_{18}$, $\text{A}_1\text{-NR}_{18}\text{C(=O)R}_{19}$, $\text{A}_1\text{-OC(=O)NR}_{18}\text{R}_{19}$, $\text{A}_4\text{-NR}_{18}\text{CO}_2\text{R}_{19}$, $\text{A}_1\text{-NR}_{18}\text{SO}_2\text{R}_{17}$, $\text{A}_4\text{-SO}_2\text{R}_{17}$, $\text{A}_1\text{-NR}_{20}\text{C(=O)NR}_{18}\text{R}_{19}$, and $\text{A}_1\text{-SR}_{18}$; or when y is 0, or when W is a group other than NHR_{22} , G may be $\text{A}_1\text{-heterocyclo}$, wherein A_1 is a bond, $\text{C}_{1-6}\text{alkylene}$ or $\text{C}_{2-6}\text{alkenylene}$ (straight or branched chain), A_2 is $\text{C}_{1-6}\text{alkylene}$ or $\text{C}_{2-6}\text{alkenylene}$, and A_3 is $\text{C}_{2-6}\text{alkenylene}$; or where G is $\text{C}_{2-6}\text{alkenyl}$, $\text{A}_1\text{-NR}_{18}\text{CO}_2\text{R}_{19}$, or $\text{A}_1\text{-SO}_2\text{R}_{17}$, or when y is 0, R_2 may be $\text{C}_{1-6}\text{alkyl}$ or $\text{C}_{2-6}\text{alkenyl}$, each substituted with heteroaryl;

W is selected from $-\text{NR}_{21}\text{R}_{22}$, $-\text{OR}_{23}$, $-\text{NR}_{21}\text{C(=O)R}_{24}$, $-\text{NR}_{21}\text{CO}_2\text{R}_{24}$, amidino, guanidino, or a substituted or unsubstituted heterocyclo, heteroaryl, or cycloalkyl selected from azepinyl, azetidinyl, imidazolyl, imidazolidinyl, pyrazolyl, pyridyl, pyrazinyl, pyridazinyl, 1,2-dihydropyridazinyl, pyranyl, tetrahydropyranyl, piperazinyl, homopiperazinyl, pyrrolyl, pyrrolidinyl, piperidinyl, thiazolyl, tetrahydrothiazolyl, thienyl, furyl, tetrahydrofuryl, morpholinyl, isoquinolinyl, tetrahydroisoquinolinyl, tetrazolyl, oxazolyl, tetrahydro-oxazolyl, and $\text{C}_{3-7}\text{cycloalkyl}$, wherein said heteroaryl, heterocyclo or cycloalkyl groups may additionally have joined thereto an optionally substituted five-to-seven membered heterocyclic, heteroaryl, or carbocyclic ring;

R_4 and R_7 are independently selected from hydrogen, alkyl, substituted alkyl, halogen, hydroxy, alkoxy, and keto;

R_5 , R_{5a} , R_{5b} , R_6 , R_{6a} , R_{6b} , R_8 and R_9 are independently hydrogen, halogen, cyano, alkyl, substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclo, aryl, heteroaryl, $-\text{OR}_{25}$, $-\text{NR}_{25}\text{R}_{26}$, $-\text{SR}_{25}$, $-\text{S(O)}_p\text{R}_{26}$, $-\text{C(=O)R}_{25}$, $-\text{OC(=O)R}_{25}$, $-\text{CO}_2\text{R}_{25}$, $-\text{C(=O)NR}_{25}\text{R}_{26}$, $-\text{NR}_{25}\text{C(=O)R}_{26}$, $-\text{OC(=O)NR}_{25}\text{R}_{26}$, $-\text{NR}_{25}\text{CO}_2\text{R}_{26}$, $-\text{NR}_{27}\text{C(=O)NR}_{25}\text{R}_{26}$ or $-\text{NR}_{25}\text{SO}_2\text{R}_{26}$; or R_{5a} and R_{5b} , R_{6a} and R_{6b} , or R_8 and R_9 taken together form a keto group ($=\text{O}$) or a monocyclic or bicyclic cycloalkyl or heterocyclo joined in a spiro fashion to ring E, or alternatively, R_{5a} and/or R_{5b} together with R_8 and/or R_9 , or R_{6a} and/or R_{6b} together with R_8 and/or R_9 , are taken to form a fused carbocyclic, heterocyclic, or heteroaryl ring; provided that, when G is a $\text{C}_{1-6}\text{alkyl}$ substituted with $-\text{OR}_{17}$, $-\text{CO}_2\text{R}_{18}$, or $-\text{C(=O)NR}_{18}\text{R}_{19}$, then R_{5a} , R_{5b} , R_{6a} , and R_{6b} are hydrogen provided R_8 and R_9 are not both hydrogen;

R_{10} is selected from hydrogen, alkyl, substituted alkyl, cycloalkyl, aryl, heteroaryl, and heterocyclo;

R_{11} is hydrogen or $\text{C}_{1-8}\text{alkyl}$;

R_{12} is $\text{C}_{1-8}\text{alkyl}$, substituted $\text{C}_{1-8}\text{alkyl}$, or cycloalkyl;

R_{13} , R_{14} , R_{15} and R_{16} are selected independently of each other from hydrogen, alkyl, substituted alkyl, amino, alkylamino, hydroxy, alkoxy, aryl, cycloalkyl, heteroaryl, or heterocyclo, or R_{13} and R_{14} , or R_{15} and R_{16} , when attached to the same carbon atom, may join to form a spirocycloalkyl ring;

R_{17} is alkyl, substituted alkyl, cycloalkyl, aryl, heterocyclo, or heteroaryl;

R_{18} , R_{19} , and R_{20} are independently selected from hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, aryl, heteroaryl, cycloalkyl, heterocyclo, or $C(=O)R_{28}$; or when G is $NH(C=O)R_{19}$, R_{19} may be a bond joined to W to define a heterocyclo ring; provided, however, that when y is at least one, W is imidazolyl, indolyl, $-NR_{21}R_{22}$, or $-OR_{23}$, and G is $-NR_{18}C(=O)R_{19}$, then R_{19} is not a C_1 -alkyl having the substituent $-NR_{29}R_{31}$;

R_{21} and R_{22} are selected from hydrogen, alkyl, and substituted alkyl;

R_{23} and R_{24} are independently hydrogen, alkyl, substituted alkyl, aryl, heteroaryl, heterocyclo, and cycloalkyl;

R_{25} , R_{26} and R_{27} are independently hydrogen, alkyl, substituted alkyl, cycloalkyl, aryl, heterocyclo, or heteroaryl; or R_{25} and R_{26} may join together to form a heterocyclo or heteroaryl, except R_{26} is not hydrogen when joined to a sulfonyl group as in $-S(O)_pR_{26}$ or $-NR_{25}SO_2R_{26}$;

R_{28} is hydrogen, alkyl, or substituted alkyl;

R_{29} and R_{31} are selected from hydrogen, alkyl, haloalkyl, hydroxyalkyl, phenylalkyl, and alkoxy carbonylalkyl, or R_{29} and R_{31} taken together form a heterocyclo ring;

n is 0, 1, 2, 3 or 4;

p is 1, 2, or 3;

~~r and s are 0 or 1;~~

x is 0, 1, or 2;

y is 0, 1, 2, 3 or 4; and

z is 0, 1, or 2.

2. (Currently Amended) A compound according to claim 1, or a pharmaceutically-acceptable salt[,] or hydrate, or prodrug thereof, in which:

, in which:

G is selected from:

a) ~~C_{2-4} alkenyl optionally substituted with phenyl;~~

a[b]) $-\text{CO}_2\text{R}_{18}$, $-\text{C}(=\text{O})\text{NR}_{18}\text{R}_{19}$, $-\text{NR}_{18}\text{C}(=\text{O})\text{R}_{19}$, and $-\text{SO}_2\text{R}_{17}$,

b[c]) C_{1-6} alkylene or C_{2-6} alkenylene joined to one of cyano, $-\text{OR}_{17}$, $-\text{C}(=\text{O})\text{R}_{18}$, $-\text{CO}_2\text{R}_{18}$, $-\text{C}(=\text{O})\text{NR}_{18}\text{R}_{19}$, $-\text{NR}_{18}\text{C}(=\text{O})\text{R}_{19}$, $-\text{NR}_{18}\text{CO}_2\text{R}_{19}$, $-\text{NR}_{18}\text{SO}_2\text{R}_{17}$, $-\text{SO}_2\text{R}_{17}$, $-\text{NR}_{20}\text{C}(=\text{O})\text{NR}_{18}\text{R}_{19}$, and $-\text{SR}_{18}$;

c[d]) when y is 0, or when W is a group other than NHR_{22} , G also may be selected from optionally substituted pyrrolidinyl or piperidinyl;

R_{17} is C_{1-4} alkyl, C_{5-6} cycloalkyl, phenyl or benzyl;

R_{18} , R_{19} , and R_{20} are independently selected from hydrogen, C_{1-4} alkyl, phenyl, benzyl, C_{5-6} cycloalkyl, $-\text{C}(=\text{O})\text{CH}_2(\text{phenyloxy})$, $-\text{C}(=\text{O})\text{CH}_2(\text{benzyloxy})$, imidazolyl, pyridyl, furyl, thienyl, or C_{1-4} alkyl or C_{2-4} alkenyl substituted with one of phenyl, pyridyl, furyl, cyclopentyl, cyclohexyl, CO_2Me , phenyloxy, or benzyloxy, wherein each ringed group of R_{18} , R_{19} , and R_{20} in turn is optionally substituted with one to two R_{36} , and/or optionally has a benzene ring or five membered heterocyclo having two oxygen atoms fused thereto; and

R_{36} is halogen, methoxy, nitro, phenyl, phenyloxy, or alkylamino.

3. (Currently Amended) A compound according to claim 2, or a pharmaceutically-acceptable salt[,] or hydrate, or prodrug thereof, in which

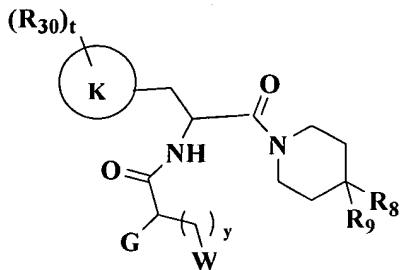
G is $-\text{NR}_{18}\text{C}(=\text{O})\text{R}_{19}$,

R_{18} is hydrogen or lower alkyl, and

R_{19} is C_{1-4} alkyl, C_{2-4} alkenyl, phenyl, benzyl, C_{5-6} cycloalkyl, $-\text{C}(=\text{O})\text{CH}_2(\text{phenyloxy})$, $-\text{C}(=\text{O})\text{CH}_2(\text{benzyloxy})$, imidazolyl, pyridyl, furyl, thienyl, or C_{1-4} alkyl or C_{2-4} alkenyl substituted with one of phenyl, phenyl, pyridyl, furyl, cyclopentyl, cyclohexyl, CO_2Me , phenyloxy, and benzyloxy, wherein each ringed group of R_{19} in turn is optionally substituted with one to two R_{36} , and/or optionally has a benzene ring or five membered heterocyclo having two oxygen atoms fused thereto.

4. (Currently Amended) A compound according to claim 2, or a pharmaceutically-acceptable salt[,] or hydrate, or prodrug thereof, in which W is OH , $-\text{NH}_2$, $-\text{NHalkyl}$, $-\text{N(alkyl)}_2$, azetidinyl, imidazolyl, piperidinyl, pyrrolidinyl, or $\text{NHCO}_2(\text{alkyl})$; or a C_{4-7} cycloalkyl optionally substituted with lower alkyl, $-\text{NH}_2$, $-\text{NHalkyl}$, or $-\text{N(alkyl)}_2$.

5. (Currently Amended) A compound according to claim 1, or a pharmaceutically-acceptable salt[,] or hydrate, or prodrug thereof, having the formula:



in which

K is phenyl or thiazolyl;

R_{30} is selected from C_{1-4} alkyl, hydroxy, alkoxy, halogen, nitro, cyano, amino, alkylamino, phenyl, and $-C(=O)phenyl$;

t is 0, 1 or 2; and

y is 0, 1 or 2.

6. (Currently Amended) A compound according to claim 1, or a pharmaceutically-acceptable salt[,] or hydrate, or prodrug thereof, in which

W is OH , $-NR_{21}R_{22}$, $-NHC(=O)R_{24}$, or $-NHCO_2alkyl$;

R_{21} and R_{22} are independently selected from hydrogen, C_{1-8} alkyl, and $(CH_2)_q-J$, wherein J is selected from napthyl, furanyl, indolyl, imidazolyl, pyrimidinyl, benzothienyl, pyridinyl, pyrrolyl, pyrrolidinyl, thienyl, and C_{3-7} cycloalkyl, wherein the alkyl, alkylene, and/or J groups of R_{21} and/or R_{22} are optionally substituted with up to three R_{33} ;

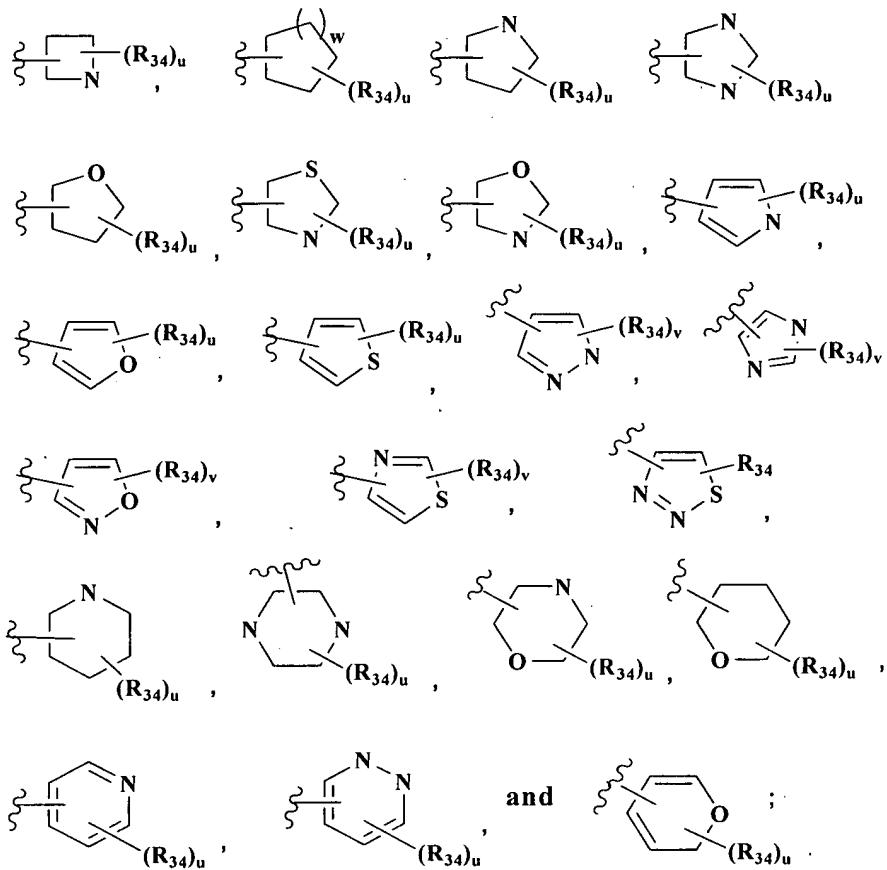
R_{24} is selected from C_{1-6} alkyl, trifluoromethyl, alkoxyalkyl, furylalkyl, alkylaminoethyl, phenyl, pyrrolylalkyl, piperidinyl, and piperidinylalkyl, wherein R_{24} in turn is optionally substituted with one to two C_{1-4} alkyl and/or $-CO_2(C_{1-4}alkyl)$;

R_{33} is selected from C_{1-6} alkyl, hydroxy, C_{1-4} alkoxy, amino, C_{1-4} alkylamino, amino C_{1-4} alkyl, trifluoromethyl, halogen, phenyl, benzyl, phenoxy, benzyloxy, $-C(=O)(CH_2)NH_2$, $-CO_2(C_{1-4}alkyl)$, $-SO_2(C_{1-4}alkyl)$, tetrazolyl, piperidinyl, pyridinyl, and indolyl, wherein when R_{33} includes a ring, said ring in turn is optionally substituted with one to two C_{1-4} alkyl, hydroxy, methoxy, and/or halogen; and

q is 0, 1, 2 or 3.

7. (Currently Amended) A compound according to claim 1, or a pharmaceutically-acceptable salt[,] or hydrate, or prodrug thereof, in which

W is a ring selected from:



R_{34} at each occurrence is attached to any available carbon or nitrogen atom of W and is selected from C_{1-6} alkyl, halogen, amino, aminoalkyl, alkylamino, hydroxy, C_{1-4} alkoxy, hydroxy C_{1-4} alkyl, $-C(=O)$ alkyl, $-C(=O)$ aminoalkyl, $-C(=O)$ phenyl, $-C(=O)$ benzyl, $-CO_2$ alkyl, $-CO_2$ phenyl, $-CO_2$ benzyl, $-SO_2$ alkyl, $-SO_2$ aminoalkyl, $-SO_2$ phenyl, $-SO_2$ benzyl, phenyl, benzyl, phenoxy, benzyloxy, pyrrolyl, pyrazolyl, piperidinyl, pyridinyl, pyrimidinyl, and tetrazolyl, and/or two R_{34} when attached to two adjacent carbon atoms or adjacent carbon and nitrogen atoms may be taken together to form a fused benzo, heterocyclo, or heteroaryl ring, and/or two R_{34} when attached to the same carbon atom (in the case of a non-aromatic ring) may form keto ($=O$), and each R_{34} in turn is optionally substituted with up to two R_{35} ;

w is selected from 0, 1, or 2;

u is selected from 0, 1, 2, and 3; and

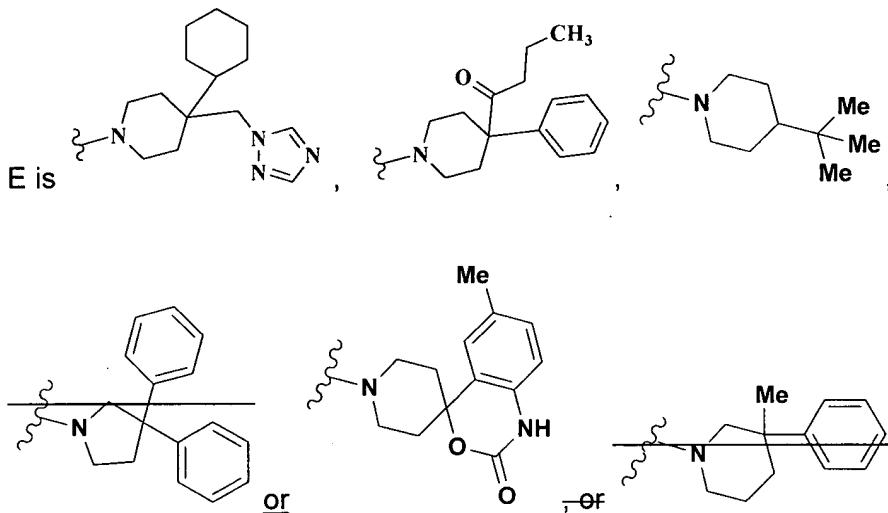
v is 0, 1 or 2.

8. (Currently Amended) A compound according to claim 1, or a pharmaceutically-acceptable salt[,] or hydrate, or prodrug thereof, in which

R_8 and R_9 are selected independently from hydrogen, alkyl, $-(CH_2)_j-C(=O)alkyl$, $-(CH_2)_j-phenyl$, $-(CH_2)_j-naphthyl$, $-(CH_2)_j-C_{4-7}cycloalkyl$, $-(CH_2)_j-heterocyclo$, and $-(CH_2)_j-heteroaryl$, provided R_8 and R_9 are not both hydrogen, or R_8 and R_9 together form a spirocycloalkyl or spiroheterocyclic ring; and

j is selected from 0, 1, 2 and 3.

9. (Currently Amended) A compound according to claim 1, or a pharmaceutically-acceptable salt[,] or hydrate, or prodrug thereof, in which



10. (Currently Amended) A compound according to claim 1, or a pharmaceutically-acceptable salt[,] or hydrate, or prodrug thereof, in which

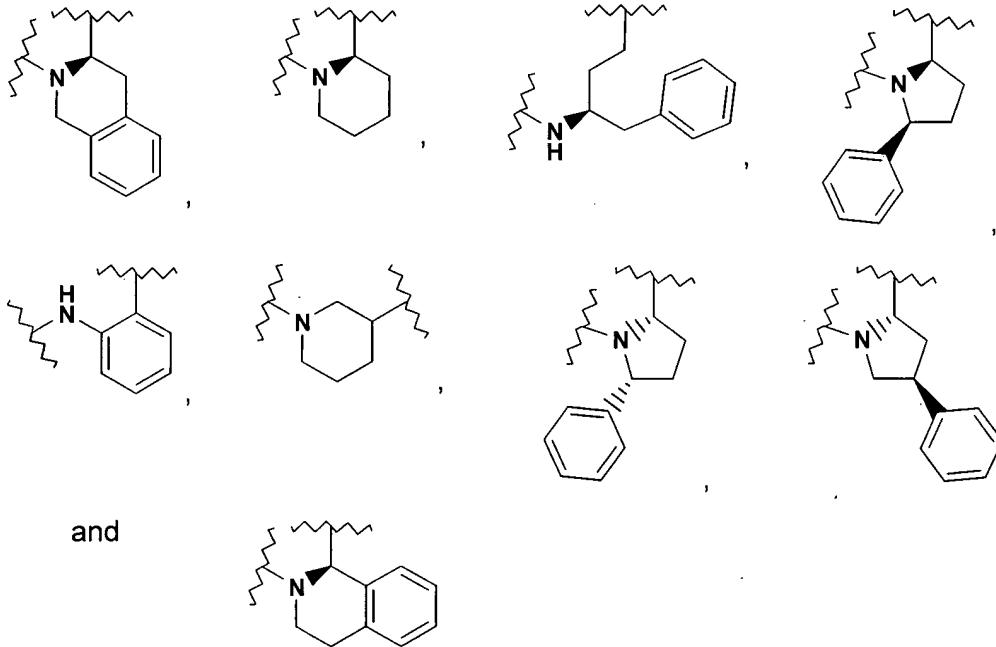
R_2 is selected from hydrogen, C_{1-6} alkyl, C_{2-6} alkenyl, biphenyl, C_{2-6} alkenylene-K, and $-(CH_2)_g-K$;

K is selected from phenyl, napthyl, thienyl, thiazolyl, pyridinyl, pyrimidinyl, and C_{5-6} cycloalkyl, wherein each group K in turn is optionally substituted with one to three R_{30} or has a benzene ring fused thereto, which also may be substituted with one to three R_{30} ;

R_{30} is selected from C_{1-4} alkyl, hydroxy, alkoxy, halogen, nitro, cyano, amino, alkylamino, phenyl, and acylphenyl; and

g is 0, 1, 2 or 3.

11. (Withdrawn) A compound according to claim 1, or a pharmaceutically-acceptable salt[,] or hydrate, or prodrug thereof, in which $-X(R_1)-CH(R_2)-CH(R_3)r-(CH_2)s-$, taken together are selected from C_{1-4} alkylene,



12. (Currently Amended) A compound according to claim 1, or a pharmaceutically-acceptable salt[,] or hydrate, or prodrug thereof, in which

X is N ;

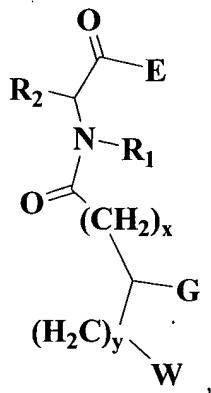
R_1 is hydrogen or C_{1-4} alkyl[;]

r is 0; and

s is 0.

13. (Canceled)

14. (Currently Amended) A compound having the formula,



or a pharmaceutically-acceptable salt[,] or hydrate, or prodrug thereof, in which:

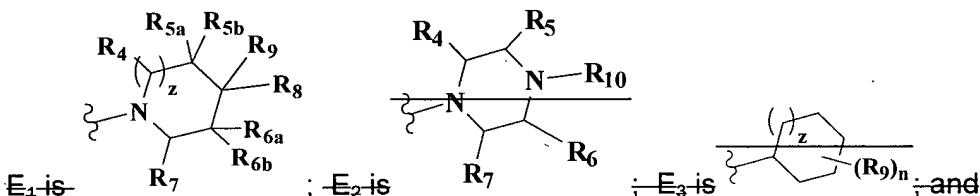
X is N or CH;

R₁ is hydrogen or C₁₋₆alkyl or is taken together with R₂ or R₃ to form a monocyclic or bicyclic aryl, cycloalkyl, heteroaryl or heterocycle;

R₂ is ~~hydrogen, aryl, cycloalkyl, heteroaryl, or heterocycle; or C₁₋₆alkyl or C₂₋₆alkenyl~~ optionally substituted with one to three of ~~hydroxy, alkoxy, halogen, cyano, trifluoromethyl, nitro, amino, alkylamine, aryl, cycloalkyl, or heteroaryl~~, and/or heterocycle; or R₂ is taken together with R₄ or R₅ to form a monocyclic or bicyclic aryl, cycloalkyl, heteroaryl or heterocycle; provided that where G is C₂₋₆alkenyl, A₁-NR₁₈CO₂R₁₉, or A₁-SO₂R₁₇, or when y is 0, R₂ may be or C₁₋₆alkyl or C₂₋₆alkenyl, each optionally substituted with heteroaryl;

R₃ is hydrogen or C₁₋₆alkyl or is taken together with R₂ to form a monocyclic or bicyclic aryl, cycloalkyl, heteroaryl or heterocycle;

E is E₁, E₂, E₃ or E₄, wherein



E₄ is NR₁₁R₁₂;

G is selected from:

a) C₂₋₄alkenyl optionally substituted with phenyl;

a[b]) -CO₂R₁₈, -C(=O)NR₁₈R₁₉, -NR₁₈C(=O)R₁₉, and -SO₂R₁₇,

b[c]) C_{1-6} alkylene or C_{2-6} alkenylene joined to one of cyano, $-OR_{17}$, $-C(=O)R_{18}$, $-CO_2R_{18}$, $-C(=O)NR_{18}R_{19}$, $-NR_{18}C(=O)R_{19}$, $-NR_{18}CO_2R_{19}$, $-NR_{18}SO_2R_{17}$, $-SO_2R_{17}$, $-NR_{20}C(=O)NR_{18}R_{19}$, and $-SR_{18}$;

c[d]) when y is 0, or when W is a group other than NHR_{22} , G also may be selected from optionally substituted pyrrolidinyl or piperidinyl;

W is selected from $-NR_{21}R_{22}$, $-OR_{23}$, $-NR_{21}C(=O)R_{24}$, $-NR_{21}CO_2R_{24}$, amidino, guanidino, or a substituted or unsubstituted heterocyclo, heteroaryl, or cycloalkyl group selected from azetidinyl, imidazolyl, imidazolidinyl, pyrazolyl, pyridyl, pyrazinyl, pyridazinyl, 1,2-dihydropyridazinyl, pyranyl, tetrahydropyranyl, piperazinyl, homopiperazinyl, pyrrolyl, pyrrolidinyl, piperidinyl, thiazolyl, tetrahydrothiazolyl, thienyl, furyl, tetrahydrofuryl, morpholinyl, isoquinolinyl, tetrahydroisoquinolinyl, tetrazolyl, oxazolyl, tetrahydro-oxazolyl, and C_{3-7} cycloalkyl, wherein said heteroaryl, heterocyclo or cycloalkyl groups may additionally have fused thereto an optionally substituted five-to-seven membered heterocyclic, heteroaryl, or carbocyclic ring;

R_4 and R_7 are independently selected from hydrogen, alkyl, substituted alkyl, halogen, hydroxy, alkoxy, and keto;

R_5 , R_{5a} , R_{5b} , R_6 , R_{6a} , R_{6b} , R_8 and R_9 are independently hydrogen, halogen, cyano, alkyl, substituted alkyl, alkenyl, hydroxy, alkoxy, alkoxy carbonyl, acyl, cycloalkyl, heterocyclo, aryl, or heteroaryl; or R_{5a} and R_{5b} , R_{6a} and R_{6b} , or R_8 and R_9 taken together form a keto group ($=O$) or a monocyclic or bicyclic cycloalkyl or heterocyclo joined in a spiro fashion to ring E , or alternatively, R_{5a} and/or R_{5b} together with R_8 and/or R_9 , or R_{6a} and/or R_{6b} together with R_8 and/or R_9 , join together to form a fused benzene or heterocyclo ring; provided that, when G is a C_{1-6} alkyl substituted with $-OR_{17}$, $-CO_2R_{18}$, or $-C(=O)NR_{18}R_{19}$, then R_{5a} , R_{5b} , R_{6a} , and R_{6b} are hydrogen;

R_{10} is selected from hydrogen, alkyl, substituted alkyl, cycloalkyl, aryl, heteroaryl, and heterocyclo;

R_{11} is hydrogen or C_{1-8} alkyl;

R_{12} is C_{1-8} alkyl, substituted C_{1-8} alkyl, or cycloalkyl;

R_{17} is alkyl, substituted alkyl, cycloalkyl, aryl, heterocyclo, or heteroaryl;

R_{18} , R_{19} , and R_{20} are independently selected from hydrogen, alkyl, alkenyl, aryl, heteroaryl, cycloalkyl, heterocyclo, $C(=O)R_{28}$ or a C_{1-4} alkyl or C_{2-4} alkenyl substituted with one or more of aryl, heteroaryl, cycloalkyl, heterocyclo, alkoxy carbonyl, phenoxy, and/or benzyloxy, and

each of said ringed groups of R_{18} , R_{19} , and R_{20} in turn is optionally substituted with one to two R_{36} ;

R_{21} and R_{22} are selected from alkyl and substituted alkyl;

R_{23} and R_{24} are independently selected from hydrogen, alkyl, substituted alkyl, aryl, heteroaryl, heterocyclo, and cycloalkyl;

R_{28} is hydrogen, alkyl, or substituted alkyl;

R_{36} is halogen, methoxy, nitro, phenyl, phenoxy, or alkylamino;

n is 0, 1, 2, 3 or 4;

~~r and s are 0 or 1;~~

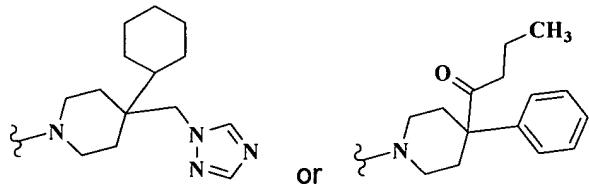
x is 0, 1, or 2;

y is 0, 1, 2, 3 or 4; and

z is 0, 1, or 2.

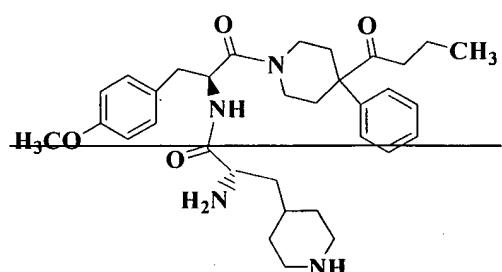
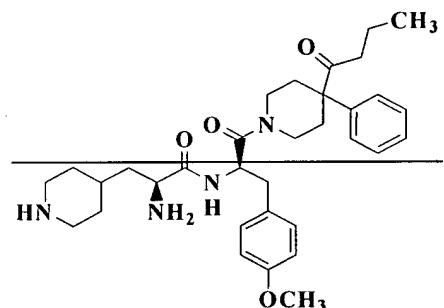
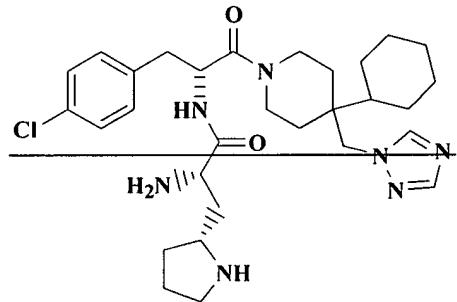
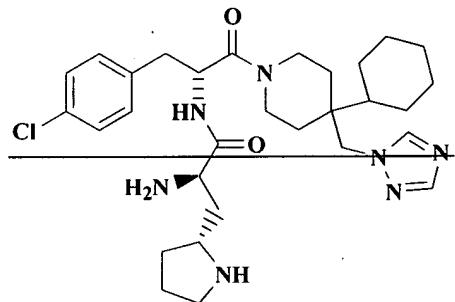
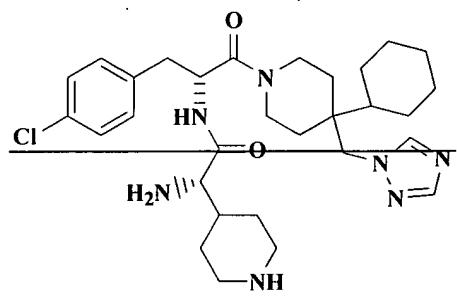
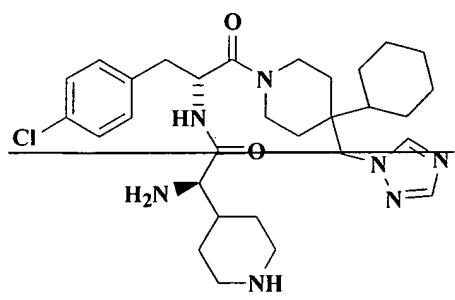
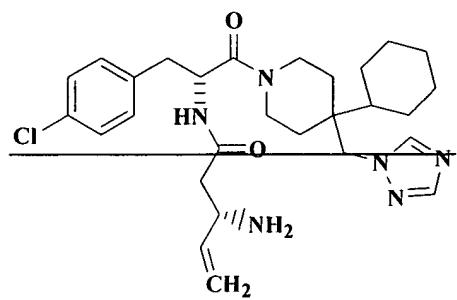
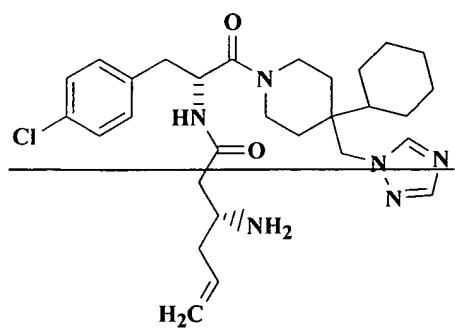
15. (Cancelled)

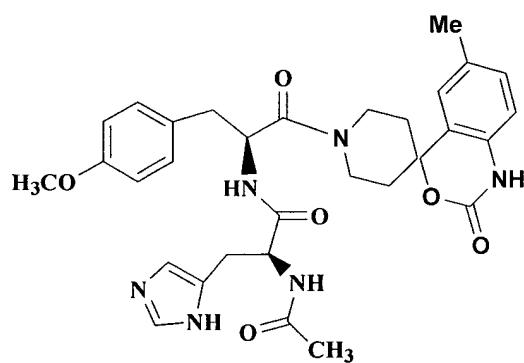
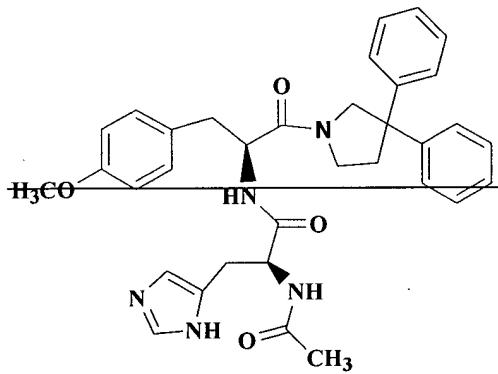
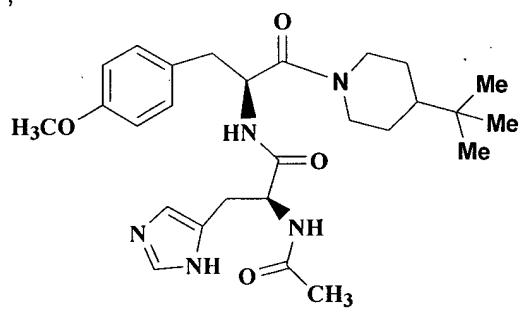
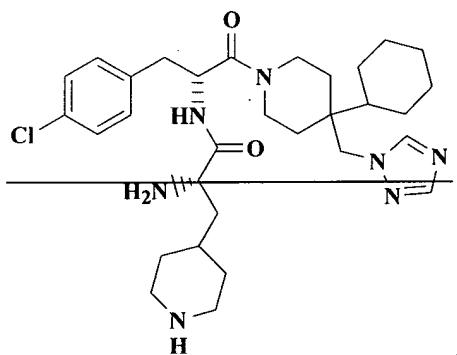
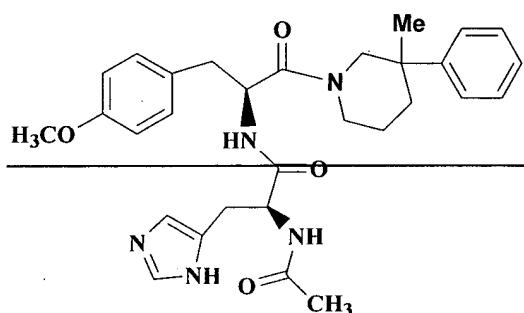
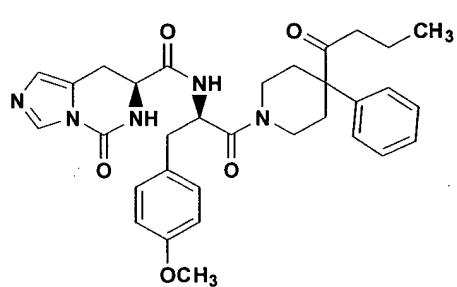
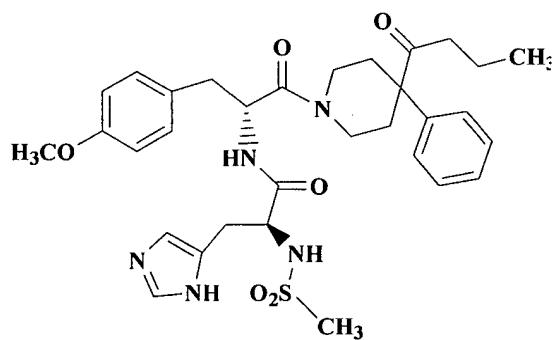
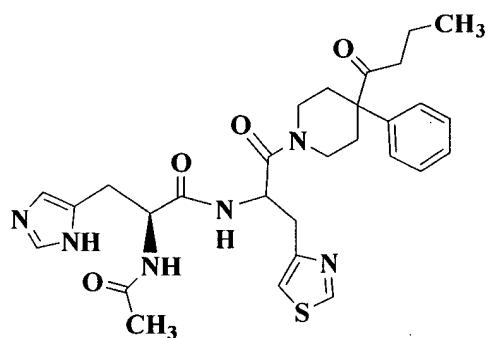
16. (Currently Amended) A compound according to claim 15, or a pharmaceutically-acceptable salt[,] or hydrate, or prodrug thereof, in which E is



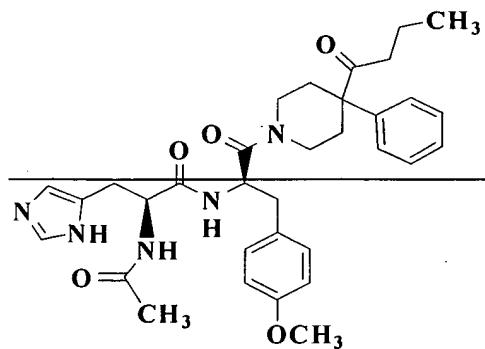
17. (Currently Amended) A compound according to claim 14, or a pharmaceutically-acceptable salt[,] or hydrate, or prodrug thereof, in which G is $\text{NHC}(=\text{O})(\text{alkyl})$ or $\text{NHC}(=\text{O})\text{phenyl}$.

18. (Currently Amended) A compound according to claim 1, having the formula,





or



or a pharmaceutically-acceptable salt[,] or hydrate, or prodrug thereof.

19. (Currently Amended) A pharmaceutical composition comprising at least one compound according to claim 1 or a pharmaceutically-acceptable salt[,] or hydrate, or prodrug thereof; and a pharmaceutically-acceptable carrier or diluent.

20. (Withdrawn) A pharmaceutical composition comprising (i) at least one compound according to claim 1 or a pharmaceutically-acceptable salt hydrate, or prodrug thereof; (ii) at least one second compound effective for treating an inflammatory or immune disease, a cardiovascular disease, or a neurodegenerative condition; and (iii) a pharmaceutically-acceptable carrier or diluent.

21. (Withdrawn) The pharmaceutical composition according to claim 20 in which the at least one second compound comprises a phosphodiesterase inhibitor.

22. (Withdrawn) A method of treating a melanocortin-receptor associated condition, the method comprising administering to a warm-blooded species in need of such treatment a therapeutically-effective amount of at least one compound according to claim 1.

23. (Withdrawn) The method of claim 22 in which the melanocortin-receptor associated condition is an MC-1R or MC-4R condition.